

Serial No. 10/695,953 Page 8

REMARKS/ARGUMENTS

Claims 1 - 15 have been replaced by new claims 16-26:

Claims 16-26 are pending in the application.

In the Office Action, claims 3, 6, 9, 11, 13 and 15 were indicated as containing patentable subject matter subject to being rewritten to include the subject matter of all the parent claims and any intervening claim(s). Claim 16 is essentially claims 1, 2 and 3 combined. Claim 17 is essentially claims 4, 5 and 6 combined. Claim 18 is essentially claims 7, 8 and 9 combined. Claim 19 is essentially claims 10 and 11, claim 10 having been amended to include clause (b) "scheduling said waiting tasks from said multi-level work queue into a job queue" and amending clause (e) to read "while considering only the tasks in the job queue that have a priority equal to that of the first task" and amending clause (e) accordingly to comport therewith. Claim 11 is essentially new claim 20 which has been amended to comport with the significant amendments to claim 19.

Claim 21 is essentially claim 12 which has been amended to include the subject matter of claim 13.

Claim 22 is claim 14 with the subject matter of claim 15 added thereto.

Referring to claims 1, 2 and 3 (now claim 16), these claims are a rewriting of the original claims. As seen in Fig. 1 and as described in the specification, there are two queues: a multi-level work queue 16 and a job queue 20. The tasks are first placed in the work queue and scheduled to the job queue according to their priority. This is, in fact, one of the strongest attributes of the invention that is not taught in the basic reference Tulpule et al., U.S. Patent No. 4,980,824.

Also the phrase, "combining the at least one selected task with the first task before a combined task, and scheduling the combined task" in original claim 1 has been corrected: Since the one "selected task" is identified in the job queue, it is replaced

Serial No. 10/695,953 Page 9

with the "combined task" and no scheduling of the combined task is needed because the selected task is already scheduled (placed in the job queue).

New claims 23-26 are believed to be the broadest claims in the application and clearly avoid the art. The references applied in the Office Action, U.S. Patent No. 4,980,824 to Tulpule et al., and D'Souza et al., U.S. Patent 6,948,172 do not alone or in combination teach or suggest the subject matter of these claims.

It will be noted that in new claim 23, two queues are specified: the multi-level work queue and a job queue.

The waiting task is selected from the highest priority job priority level of the multi-level work queue and then determining whether the computing device has sufficient resources to execute the waiting task. Next, the waiting task is scheduled into a job queue if the computing device has sufficient resources to execute the waiting task.

Claim 26 depends from claim 23 and modifies step c reciting "sending the job queue to locate a selected task which is capable of being executed simultaneously with the waiting task while considering only the tasks in said job queue with a priority equal to that of the waiting task and if such selected task is located into said job queue, replacing said selected task with a combined task that comprises the waiting task and the selected task for simultaneous execution."

The features and sequence recited in the claim are not taught or suggested by the two references in that they do not deal with multi-level scheduling as recited in claims 23-26. The Tulpule et al. reference does not use a multi-level work queue and a job queue nor does the D'Souza et al. reference. Tulpule et al. only mentions that the executable tasks are queued. Moreover, in the reference, each executive task has the task in a job queue.

Moreover, the prerequisites are generated at the compile time and based on the precedence graph (Fig. 3). In applicants'

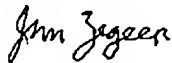
Serial No. 10/695,953 Page 10

invention, the tasks are organized in a multi-level work queue based on their priority and moved accordingly into the job queue by the scheduler.

Finally, in Tulpule et al, a list of prerequisites of executable tasks contains all of the other tasks which must be completed before the task in question can be initiated. Applicants do not use a precedence graph or the equivalent thereof.

In view of the above, further and favorable reconsideration is respectfully requested.

Respectfully submitted,



Jim Zegeer, Reg. No. 18,957
Attorney for Applicants

Suite 108
801 North Pitt Street
Alexandria, VA 22314
Telephone: 703-684-8333

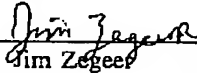
Date: March 29, 2007

In the event this paper is deemed not timely filed, the applicant hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Deposit Account No. 26-0090 along with any other additional fees which may be required with respect to this paper.

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature: _____


Jim Zegeer

Date: March 29, 2007